HUMANITY'S DEADLIEST ENEMY AGAIN BUZZES IN WASHINGTON.

WHAT ONE FLY CAN DO

One fly lays 120 eggs, which are hatched and developed into full grown flies in ten days.

If one-half of these are females, they will produce 3,600 in the next ten days.

At the end of thirty days the number will be 216,000.

In forty days the number increases to 12,960,000.

Scientists say each fly carries 100,000 disease bacteria.

That means 1,296,000,000,000 disease bacteria spread within forty days.

One thousand flies weigh an ounce; 16,000 weigh a pound, and the product of one fly for forty days weighs 810 pounds.

HUMANITY'S worst enemy—the house fly—is an unwelcome visitor in our city once more.

These little winged carriers of disease come every year with the advance guard of spring, and the question arises: How are you going to receive them?

Will it be sticky flypaper, screens, and other methods of combat for his? Or will it be plenty of refuse lying around in convenient places where he may grow fat and multiply by the billion?

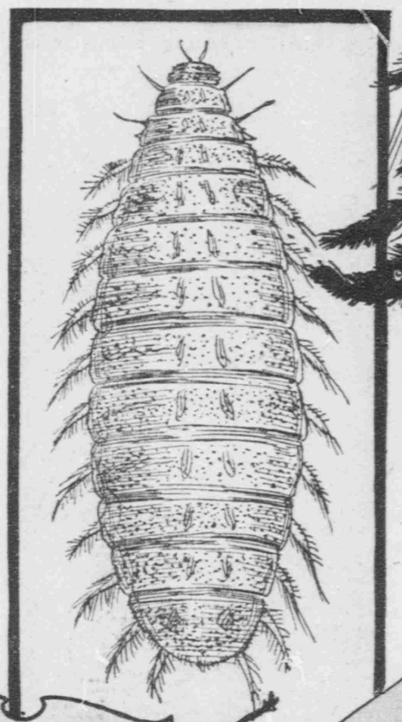
The average person has never regarded the little house fly as much of a nuisance, except when he becomes too numerous for comfort. Many people are prone to say: "Don't kill the poor little fly. It doesn't do any harm."

But it does. Scientists have learned that more scourges and contagious diseases have been spread by the house fly than by any other agent. Examine a fly under a microscope and you will find it covered with disease germs.

Then think of the number of flies that can spring into existence within a few days! It is a serious question and one that should be carefully thought of by every household in Washington.

WHAT is to be done with the house fly, recognized by bacteriologists as the most dangerous of the insects that infest the United States during the hot summer months. The advance guard of this little enemy of health is already showing up in Washington in large numbers, and the Health Department is busy trying to find some way to cope with the situation.

Orders have been issued to keep stables, kitchens, and other places where these little pests breed by the millions every month, as clean as possible, and in this way it is hoped that the nuisance will be abated to some extent. A careful screening of all windows, especially to stables, has also been requested. It has been shown by scientists that a single stable, where only one horse is kept will supply flies for an extended neighborhood.



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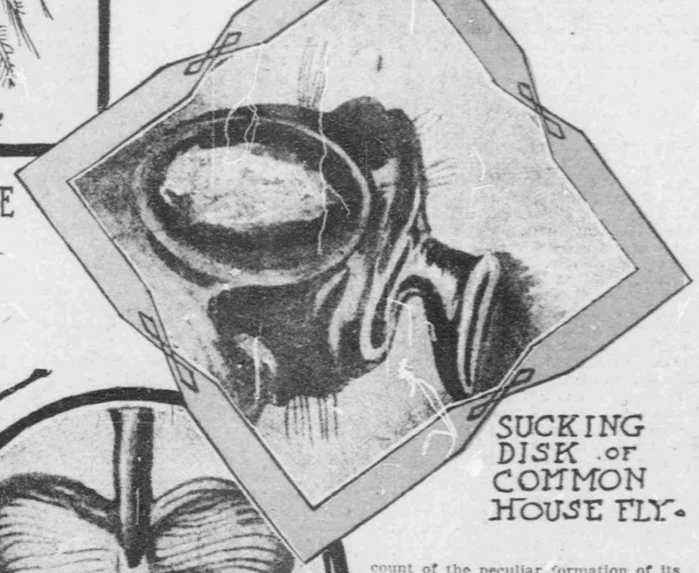
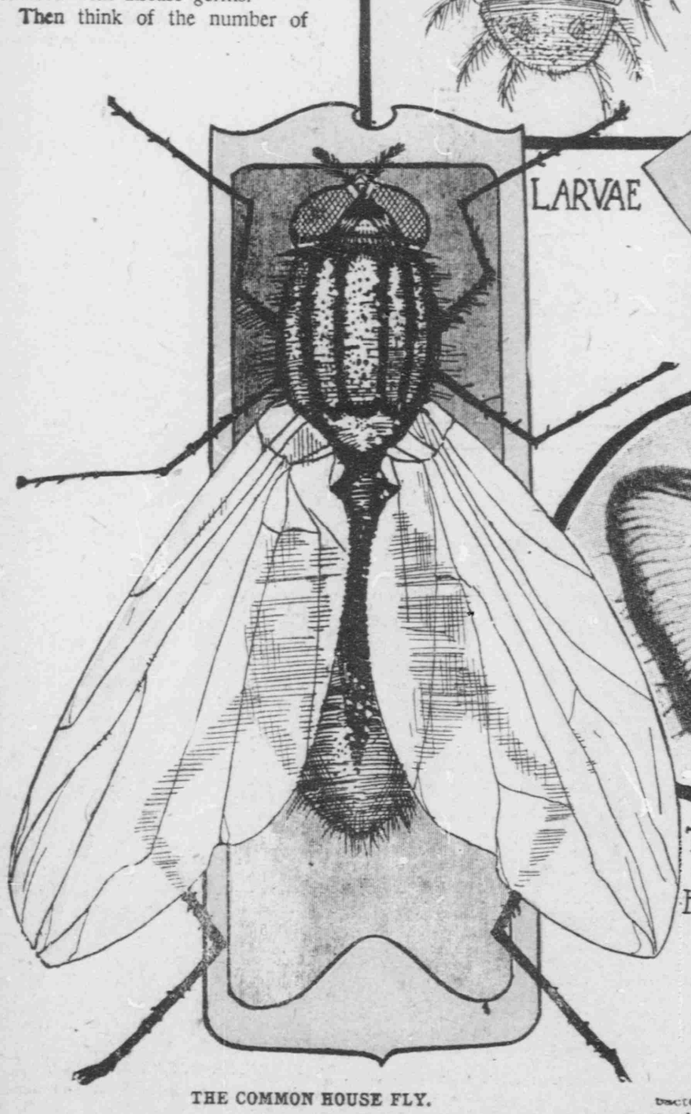


SUCKING DISK OF COMMON HOUSE FLY.



TONGUE OF THE HOUSE FLY.

THE COMMON HOUSE FLY.

The form and character of the fly's body is particularly adapted for carrying infectious diseases, and as they multiply in decaying matter, at the rate of millions for every fly, the spread of disease-breeding germs is apparent. Physicians credit a vast majority of diseases contracted during the summer months, many epidemics of various forms of sickness, to the path of the fly. In an experiment made by the Health Department last summer it was shown that one fly carried 100,000 disease bacteria—enough, physicians say to cast a whole city into the throes of an epidemic.

Several Species of Flies.

There are several species of house flies, says Dr. L. O. Howard, of the bureau of entomology of the Department of Agriculture, but only one of these should be called the house fly proper. This variety is known as musca domestica. It is of medium size, of a grayish color and has its mouth tip spread out for sucking up liquid foods. It breeds in stables and dooryard filth, and is found in nearly all parts of the world. This fly, on account of the peculiar formation of its mouth, can not bite, although the impression is general that the biting fly is the same as the house fly. This idea is caused by the frequent appearance of the stable fly, which does bite, and which finds much of its food in the blood of animals and human beings. The stable fly is probably second in abundance of the fly family in the United States.

A third species is called the cluster fly. It is seen in large numbers early in the spring, and is considered just as dangerous as the two more abundant varieties. This fly is some larger than the house fly and has a shrinking of yellowish hairs. This is the variety which is commonly seen dead upon the window panes.

The Health Department, under the direction of Dr. Woodward, has taken upon itself the task of ridding Washington of a great number of flies this summer. It is known that the vast majority of them breed in stables, and every care will be taken to keep these places as clean as possible. The fly will also lay its eggs in cow stalls, but it does not multiply in such large numbers there.

Ten Days One Generation.

Ten days complete a generation of house flies in the summer. The number of eggs laid by each fly is 120. Thus it can be seen that in the course of a summer the offspring of a single, overwintering fly will reach a figure almost beyond belief.

Let it be assumed that one-half of a fly's eggs batch out and live to rear families of their own. One fly rears sixty females in ten days, or 3,600 in ten days more. In thirty days the number has grown to 216,000, and to 12,960,000 in forty days. Allowing 1,000 flies to the ounce, or 16,000 to the pound, it will be found that the total produce of one fly in forty days will weigh 810 pounds.

"Much has been said about the scattering of diseases by mosquitoes," says the report of the Bureau of Entomology, "but they are not to be compared with the flies as disseminators of disease. Flies travel from filth to food, and the germs are carried to the kitchens and dining rooms through various delivery methods."

The fly scents filth about a hundred yards, and loses no time in sticking its mouth on these millions of germs, and smear them over the thousands of hairs on its body and legs. It then returns to leave these bacteria in the homes of the country. There the fly crawls over the meat, bread butter, falls into the milk, or makes its way to the decayed fruit.

Millions of Dangerous Germs.

Prof. William L. Underwood, of the Massachusetts Institute of Technology, recently took a microscopic showing of the tracks of a fly across a plate of jelly, which takes up and nourishes disease germs. In the few seconds which it took to cross the surface of the jelly the fly deposited millions of dangerous germs.

"The principal insect in the spread of typhoid fever is the house fly," says Dr. Howard in his report from the Bureau of Entomology, "and many epiremics accredited to defective plumbing start with the house fly."

"During the summer of 1897 a series of experiments were carried on with the intention of showing whether it would be possible to treat the stables in such a way as to stop the breeding of flies. My experience with the use of air-slaked lime to prevent the breeding of the horned fly suggested experimentation with the different lime compounds. I found it to be perfectly impracticable to use air slaked lime, land plaster, or gas lime with good results. Few or no larvae were killed by any of these three substances. Chloride of lime, however, I found to be an excellent maggot killer. Chloride of lime, so cheap in Europe, costs at the least 3 cents a pound in large quantities in this country, so that the frequent treatment with this substance would be out of the question in actual practice.

Experiments With Kerosene.

"I, therefore, carried on experiments with kerosene. I found that eight quarts of fresh refuse sprayed with one pint of kerosene, which was afterward washed down with one quart of water, was thoroughly rid of living maggots. Every individual was killed by the treatment. This experiment and others of a similar nature on a small scale were so satisfactory that I considered at the close of the season that a practical conclusion had been reached, and that it was perfectly possible to treat any refuse economically, and in such a way as to prevent the breeding of flies.

"Practical work in the summer of 1898, however, demonstrated to me that this was simply another case where an experiment on a small scale failed to develop points which in practical work would vitiate the results.

"The stable of the United States Department of Agriculture, in which about twelve horses are kept, is situated about 100 yards behind the main building of the department, and about ninety yards from the building in which the Bureau of Entomology is situated. This stable has always been very carefully kept. The refuse is thoroughly swept up every morning, carried out of the stable, and deposited in a pile behind the building. This pile, after accumulating for a week or ten days, or sometimes three weeks, was carried off by the gardeners and spread upon distant portions of the grounds. At all times in the summer this pile swarmed with maggots of the house fly. It would be safe to say that on an average many thousands of the dangerous flies issued from the pile every day, and that at least a large share of the flies which constantly bothered the employes in the two buildings mentioned come from this source.

Natural Enemies of Flies.

"The house fly has a number of natural enemies. The house centipede destroys it in considerable numbers, there is a small reddish mite which frequently covers its body and gradually destroys it and it is subject to the attacks of parasites in its larvae condition. It is destroyed by beetles at the same time.

"The most effective enemy, however, is a fungus disease known as empusa americana muscae, which carries off flies in large numbers, particularly toward the close of the season. The epidemic ceases in December, and, although many thousands are killed by it the remarkable rapidity of development in the early summer months soon replaces the thousands destroyed.

"It would appear from what we know of the life history of the common house fly and from what we know from remedial experimentation already carried on, that it is perfectly feasible for cities and towns to so greatly reduce the number of these annoying insects as to render them of comparatively slight account. The health departments of most of our cities have the authority to abate nuisances dangerous to health, and it is easy for the health departments to formulate rules concerning the construction and care of stables and the keeping and disposal of refuse that will do away with the house fly nuisance. Such a series of rules was formulated in the spring of 1906 by the health department of Asheville, N. C., and an effort is being made during this summer to see if they are enforced. The health department of the District of Columbia issued a series of these rules May 3, 1906, by authority of the Commissioners of the District.

"One uniform method of ridding the community of the flies cannot be adopted everywhere, but some of the following sets of rules will apply in every locality, and will prove effective:

"'Do not allow any decaying matter of any sort to accumulate on your premises.

"'Abolish all antiquated sewage systems.

"'If your cellar is damp, clean out the dark corners and apply lime.

"'Pour kerosene into the drains and also treat with kerosene all waste material not intended for fertilizing purposes.

"'Kitchen waste intended as food for hogs and other animals should be removed daily. If this waste is deposited in large cans it should be collected at least once a week.

"'Haul out stable refuse and spread it on the soil every day, or at outside every week. The pile should be screened if allowed to grow to any size.'"

HYPNOTISM A CURE, SAYS NOTED DOCTOR

(Continued from First Page.)

notist over the hypnotized can be made practically absolute is shown by the readiness with which the hypnotist can make the hypnotized obey his commands, sleep, wake, laugh, weep, or go through any emotion at all. My medical brethren say to me that this sounds all very well, but how can it help the sick?

Two instances may answer that objection.

I was summoned to the bedside of a society woman, a lady so brilliant that she narrowly escapes being a genius. As the result of a series of receptions, balls, theater parties, and so on, she had taken to her bed, suffering with what she called "an attack oof nerves." Her family physician had seen her, and told her she was worn out—which, by the way, was not calculated to give her any confidence in herself or to inspire the belief that she would soon get well. Her intimate friends also called on her, sympathized with her, told her what a frightful thing nervous prostration was, and hazarded the hope that she might get well in four months!

Naturally, when I found her, she was in despair, and her "attack of nerves" had increased to alarming proportions. I took her hand, assured her there was nothing serious the matter with her, and then, in the presence of two of her friends, she submitted to hypnotic treatment. In three days, she was driving on Connecticut avenue. Her entire recovery had been caused by her being hypnotized an hour on two separate days, and her brain receiving from my brain the emphatic suggestion that she was not ill, that her nerves were not shattered, and that they would rapidly be put into fit condition by the ordinary rules of health.

Man's Ambition Restored.

Another case was that of a young man who had been under medical treatment for two years. His trouble was that he had overworked himself in his collegiate studies, and, as a result of the despondent processes of thought to which a tired brain is subject, he had persuaded himself that he was good for nothing and had given up practically every ambition he had ever had. By a course of suggestions to him that his life was just beginning, that his brain had received enough rest and that he would take up his work

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